Economic Factors to Weigh in Making Decisions in Drought

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### Annual Forage Production in the Nebraska Sandhills

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Grasses</td>
<td>729</td>
<td>451</td>
<td>353</td>
<td>779</td>
</tr>
<tr>
<td>Forbs</td>
<td>13</td>
<td>0</td>
<td>1</td>
<td>87</td>
</tr>
<tr>
<td>Total</td>
<td>742</td>
<td>451</td>
<td>354</td>
<td>866</td>
</tr>
</tbody>
</table>

Kartchner, 1983
## Difference In Mean Simulated changes in Net Worth

<table>
<thead>
<tr>
<th>Month</th>
<th>Net Worth</th>
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<tbody>
<tr>
<td>March Range</td>
<td>$150,919</td>
</tr>
<tr>
<td>March Cornstalks</td>
<td>$104,082</td>
</tr>
<tr>
<td>June Range</td>
<td>$156,993</td>
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<tr>
<td>June Cornstalks</td>
<td>$97,367</td>
</tr>
<tr>
<td>August Cornstalks</td>
<td>$93,876</td>
</tr>
</tbody>
</table>
The Answer is simple (right?)

MR = MC
The First Issue Is When

- When are you in a drought?
- When is the best time to make decisions?
  - How severe will the drought be?
Other Problems With The Simple Answer Are Complex

- The factors that effect cost
  - Cost factors
    - Feed
    - Labor
    - Capital
    - Recovery damage trade-off
More Complexity

- The factors that effect Revenue
  - Revenue
    - Seasonal trends
    - Cyclical trends
    - Institutional effects
      - Tax law
      - Disaster Relief
      - Insurance ?
Several Examples

- Increasing Cost vs. Decreasing Revenue
- Increasing Cost vs. Increasing Revenue
- Decreasing Cost vs. Increasing Revenue
- Decreasing Cost vs. Decreasing Revenue
Other Factors That Influence Economic Decisions/Choices

- Personal Goals
- Business Goals
- Beliefs about your current environment
- Understanding of your options
- Availability of other resources
Thank-You

Discussion or Questions
One Possible Solution Is To Develop a Stepwise Stochastic Decision Aid

- A decision aid that allows them to see the outcome of their expectations, based on the current forecast.